STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION 11 DISTRICT 1

CONTRACT PROPOSAL

SMALL BUSINESS ENTERPRISE PROJECT

WBS ELEMENT	NUMBER:	11C.086120	(CONTRACT:	11-01-708	
ROUTE: SR 134	15		COUNTY:	Surry		
DESCRIPTION:	Grading, V	Videning, Drai	nage, Base a	nd Paving on 0	.96 Miles of	
	SR 1345 (B	eulah Church	Road) in Su	rry County, No	orth Carolina	
BID OPENING:	October 13	, 2011 @ 10:00	0 AM			

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER	N.C. CONTRACTOR'S LICENSE NUMBER
ADDDECC OF DIDDED	

RETURN BIDS TO:

QUOTE NO: 11-01-708 – SR 1345 SURRY N.C. DEPARTMENT OF TRANSPORTATION JOE L. LAWS, PE, DIVISION PROJECT MANAGER 801 STATESVILLE ROAD P.O. BOX 250 NORTH WILKESBORO, NORTH CAROLINA 28659

INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!
- 2. All entries on the bid sheet, including signatures, shall be written in ink.
- **3.** The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures.
- **4.** An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
- 5. The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
- 7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name and signature of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number (or Social Security Number of Individual)
 - e. Contractor's License Number (if Applicable)
- **8.** Bids submitted by corporations shall bear the seal of the corporation.
- **9.** The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- 10. The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION ENGINEER'S OFFICE AT 801 STATEVILLE ROAD, P.O. BOX 250, NORTH WILKESBORO, NORTH CAROLINA 28659 BY 10:00 AM ON THURSDAY, OCTOBER 13, 2011.
- **12.** The sealed bid must display the following statement on the front of the sealed envelope:

QUOTE NO: 11-01-708 - SR 1345 SURRY

13. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

JOE L. LAWS, PE, DIVISION PROJECT MANAGER N.C. DEPARTMENT OF TRANSPORTATION P.O. BOX 250 801 STATESVILLE ROAD NORTH WILKESBORO, NORTH CAROLINA 28659

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-11) of the Standard Specifications for Roads and Structures 2006. The lowest responsible Bidder will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

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DIVISION CONTRACT

General Provisions

GENERAL

This is a Small Business Enterprise Project.

This contract is for grading, widening, drainage, base and paving on SR 1345 (Beulah Church Road) in Surry County under the provisions of North Carolina Department of Transportation's Small Business Enterprise Program. Your firm does not have to be formally identified as a minority, woman, or disadvantaged business to qualify for this program, but your business must have had an annual income of \$1,500,000 or less for the previous calendar year (not including costs for materials). Under the provisions of this Program, contract payment and contract performance bonds are not required.

You must be registered as a Small Business Enterprise through the North Carolina Department of Transportation Contractual Services Unit to be eligible to bid on any SBE project. For more information on becoming registered with the Department, please contact the Office of Contractual Services at (919) 733-5616.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, the *North Carolina Department of Transportation Roadway Standards Drawings*, the *National Electric Code*, the *National Electric Safety Code*, and the current edition of the *Manual of Uniform Traffic Control Devices (MUTCD)*. These manuals may be found on the internet at:

http://www.ncdot.org/doh/construction/ps/specifications/dual/

http://www.ncdot.org/doh/construction/ps/std_draw/

http://mutcd.fhwa.dot.gov/

MANDATORY PRE-BID CONFERENCE AND PROPOSAL REVIEW

In order for all prospective bidders to have an extensive knowledge of the project, all prospective bidders shall attend a mandatory pre-bid conference as shown below:

Date and Time: September 29, 2011 at 2:00 PM

Place: Project Site

Location: At the intersection of SR 1609 (Calloway Road) and SR 1345 (Beulah Church

Road)

County: Surry

Contact for Directions: Greg Johnston – 336-835-4241

The Mandatory Pre-Bid Conference will begin promptly at **2:00 PM**. An official clock for the pre-bid conference will be designated. Contractors who are late will not be permitted to sign in or to participate in the conference.

Bidders are expected to make their own investigation of the site prior to the conference.

No questions concerning the project will be answered by any Department personnel at any time, except at the Mandatory Pre-Bid Conference.

This conference will be conducted by Department personnel to ensure all prospective bidders are given an opportunity to obtain information relevant to the project and given an opportunity to ask any questions they may have.

The Engineer will explain areas of responsibility, standards of performance and expected results. This is also intended to be a time for the Contractor to raise questions as to the present condition of the facility. The Contractor is encouraged to make his/her own observations of the sites to determine the condition of the items identified in this contract as the Contractor's responsibility. Any changes made to the contract during the pre-bid conference will be documented and included in an addendum. The entire addendum must be returned with the bid package, signed and dated. Failure to do so will result in disqualification of bid.

Eligibility to Bid

All prospective bidders at the Mandatory Pre-Bid Conference shall meet all of the requirements as shown below:

- 1. Only Bidders who have attended the entire conference and properly registered at the Mandatory Pre-Bid Conference will be considered eligible to bid on this project. A bid received from a Bidder who has not attended and properly registered at the conference will be rejected as an irregular bid and will not be considered for award.
- 2. Attendance at the Mandatory Pre-Bid Conference will not meet the requirements of proper registration unless the individual attending has registered at the conference in accordance with the following:
 - The individual attending the Mandatory Pre-Bid Conference is a full time employee of the company being represented and has **administrative and/or supervisory** authority over the work to be performed under this contract.
 - The individual signs his/her name and company title on the official roster.
 - The individual writes in the name and address of the company he or she represents.
 - Only one company is shown as being represented by the individual attending.

• The individual shall sign out when the conference is over.

Attendance at any prior pre-bid conference will not meet the requirement of this provision.

CONTRACT TIME AND LIQUIDATED DAMAGES

The date of availability is November 7, 2011.

The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

No work will be permitted and no contract will be executed until all required bonds and prerequisite conditions and certifications have been satisfied. No work will be permitted prior to issuance of the purchase order.

The completion date for this project is May 15, 2012. No extensions will be authorized except as authorized by Article 108-10 of the 2006 Standard Specifications.

Liquidated damages for this contract are Three Hundred and Fifty Dollars (\$350.00) per calendar day.

MAJOR CONTRACT ITEMS

The following listed items are the major contract items for this contract (See Articles 101 and 104-5 of the 2006 Standard Specifications):

Line #	Description
6	Aggregate Base Course

SPECIALTY ITEMS

Items listed below will be the specialty items for this contract (See Article 108-6 of the 2006 Standard Specifications).

Line #	Description
9	Fence Reset
10 thru 20	Erosion Control Items

PREPARATION AND SUBMISSION OF BIDS

The entire bid proposal package, properly signed and executed, must be returned in order for the bid to be considered as responsive. **Incomplete proposal packages may be considered unresponsive.** Bid proposals shall be completed in ink and any corrections shall have one strike through with the correction initialed by the bidder.

Any firm that wishes to bid on this project as the prime contractor must be prequalified for the type of work they wish to perform prior to submitting their bid. For the purposes of prequalification, any firm that is currently prequalified as a prime or a subcontractor on centrally let contracts for the appropriate work codes is considered eligible to work and/or bid on this contract as long as other items such as bonding and license requirements for the contract are met.

Information regarding the requirements to become prequalified as a Purchase Order Contract contractor, can be found at the following website: http://www.ncdot.org/business/howtogetstarted/

All bids shall be prepared and submitted in accordance with the listed requirements of Article 102-8 of the 2006 Standard Specifications.

In accordance with GS 136-28.10, if the total bid amount of the contract exceeds \$500,000, the bid will not be considered for award.

EXECUTION OF SIGNATURE SHEETS AND DEBARMENT CERTIFICATION

The Bidder's attention is directed to the various sheets in the proposal form, which are to be signed by the Bidder. A list of these sheets is shown below. The signature sheets are located behind the item sheets in the proposal form.

- 1. Bid Form
- 2. Non collusion affidavit
- 3. Bidder Certification of MB/WB, if applicable

The Bidder shall certify his and to the best of his knowledge all subcontractors, material suppliers and vendors utilized herein current status concerning suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency, in accordance with the "Debarment Certification" located behind the signature sheets in the proposal forms. Execution of the bid signature sheets in conjunction with any applicable statements concerning exceptions, when such statements have been made on the "Debarment Certification", constitutes the Bidders certification of "status" under penalty of perjury under the laws of the United States.

LIABILITY INSURANCE

Page 1-68, Article 107-16 is amended to include the following as the first, second, third and fourth paragraphs:

The Contractor shall be liable for any losses resulting from a breach of the terms of this contract. The Contractor shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Contractor and that the Contractor has an opportunity to defend against such claims. The Contractor shall not be responsible for punitive damages.

The Contractor shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Contractor from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the Contractor. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Contractor shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

WORKMEN'S COMPENSATION INSURANCE

The contractor shall defend, indemnify and hold harmless the North Carolina Department of Transportation, its officers and employees from any claim, demand, suit, liability, judgment and expense (including attorney's fees and other costs of litigation) arising out of or relating to injury, disease, or death of persons or damage to or loss of property resulting from or in connection with the negligent performance of this contract by the contractor, its agents, employees, and

subcontractors or any one for whom the contractor may be responsible. The obligations, indemnities and liabilities assumed by the contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The contractor shall indemnify and hold harmless the Department of Transportation from any claim, demand, suit, liability, judgment, and expense involving damage or loss to the contractor's equipment (including vandalism, theft, fire and acts of God) arising out of or relating to work performed under this agreement. The obligations, indemnities and liabilities assumed by the contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The contractor further agrees to indemnify the Department of Transportation for any damages to the roadway, highway signs, highway equipment and other property owned or in possession of the Department of Transportation, brought about by reason of the negligent operation of the leased equipment. The contractor further agrees to indemnify and save harmless the Department of Transportation, its officers and employees from any claims or amounts recovered by any of the contractor's employees under the Worker's Compensation Act.

Pursuant to N.C.G.S. § 97-19, all contractors of the Department of Transportation are, prior to beginning services, required to show proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors stating that it has complied with N.C.G.S. § 97-93 irrespective of whether subcontractors have regularly in service fewer than three employees in the same business within the State of North Carolina, and subcontractors shall be hereinafter liable under the Workers' Compensation Act for payment of compensation and other benefits to its employees for any injury or death due to an accident arising out of and in the course of performance of the work insured by the subcontractor.

Proof of insurance shall be furnished to the Engineer prior to beginning work.

LICENSES

Under the provisions of the North Carolina Department of Transportation's Small Business Enterprise Program, the contractor is **not required to possess a license** to perform work on this contract.

SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the *Standard Specifications*.

DEFAULT OF CONTRACT

The Department of Transportation shall have the right to declare a default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the *Standard Specifications*.

PARTIAL PAYMENT

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. All requests for payment shall be made on the form furnished to the Contractor by the Department of Transportation. The form shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor. Minority Business Enterprise (MBE), Women's Business Enterprise (WBE) and/or Disadvantage Business Enterprise (DBE) participation shall be listed on the appropriate form (DBE-IS) and shall accompany all requests for payment. If there is no participation the word "None" or the figure "0" shall be entered. Requests for payment will not be processed without the submission of the DBE-IS form. One hundred percent (100%) payment shall be made after successful completion of the work as verified by the final inspection.

INVOICES

Invoices must be "electronically scanned" by our office and the image is transmitted to the Purchasing Unit to verify payment. To avoid confusion and delay of payments each invoice should have a <u>Unique Invoice Number</u>, i.e. 1, 2, 3.... In addition, the invoice should be positively identified and associated with the Purchase Order by including the <u>Purchase Order Number</u> on the Invoice.

RETAINAGE AND PROMPT PAYMENT

<u>Prompt Payment of Monies Due Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage</u>

Contractors at all levels; prime, subcontractor, or second tier contractor, shall within seven calendar days of receipt of monies, resulting from work performed on the project or services rendered, pay subcontractors, second tier subcontractors, or material suppliers, as appropriate. This seven-day period begins upon knowledgeable receipt by the contracting firm obligated to make a subsequent periodic or final payment. These prompt payment requirements will be met if each firm mails the payment to the next level firm by evidence of postmark within the seven-day period.

This provision for prompt payment shall be incorporated into each subcontract or second tier subcontract issued for work performed on the project or for services provided.

The Contractor may withhold up to 3% retainage if any subcontractor does not obtain a payment and performance bond for their portion of the work. If any retainage is held on subcontractors, all retainage shall be released within seven calendar days of satisfactory completion of all work. For the purpose of release of retainage, satisfactory completion is defined as completion of all physical elements and corresponding documentation as defined in the contract, as well as agreement between the parties as to the final quantities for all work performed in the subcontract. The Department will provide internal controls to expedite the determination and processing of the final quantities for the satisfactorily completed subcontract portions of the project.

Failure of any entity to make prompt payment as defined herein may result in (1) withholding of money due to that entity in the next partial payment until such assurances are made satisfactory to this provision; or (2) removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.

MANDATORY SUBCONTRACTOR INFORMATION

The Contractor is to provide a list of all proposed subcontractors he or she plans to use on this project. This list shall include all subcontractors that will be used, not only MBE, WBE or DBE firms. Only pre-approved subcontractors that are registered with the NCDOT may be used. A listing of all contractors (prime or subcontractor) may be found at the following website: http://apps.dot.state.nc.us/vendor/directory/

The Subcontract Approval Form (Form SAF) must be completed for each subcontractor that will be used and returned <u>prior to the issuance of the purchase order</u>. This form can be found at the following website:

http://www.ncdot.org/doh/operations/dp_chief_eng/constructionunit/saf.xls

If the proposed subcontractor cannot fulfill their obligation and a substitute must be used, then an appropriate form for the replacement subcontractor must delivered to the administrating officer before the new subcontractor is used.

Failure to provide this information (regardless of any goals in contract) may result in the contract being awarded to another contractor.

<u>AVAILIBILITY OF FUNDS – TERMINATION OF CONTRACT</u>

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. - Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures, dated July 1, 2006.*

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Laws to be Observed

In accordance with 107-1 of the *Standard Specifications*, The Contractor shall keep himself fully informed of all Federal and State laws, all local laws, ordinances, and regulations, and all orders and decreed of bodies or tribunals having any jurisdiction or authority which may in any manner affect those engaged or employed in the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall indemnify and hold harmless the Board of Transportation and the Department of Transportation and their agents and employees from any claim or liability arising from or based on the violation of any such law, ordinance, regulations, order, or decree, by the Contractor or by his agents and employees.

Responsibility For Damage Claims

In accordance with 107-15 of the *Standard Specifications*, The Contractor shall indemnify and save harmless the Board of Transportation and its members and the Department of Transportation and its officers, agents, and employees from all suits, actions, or claims of any character brought for any injury or damages received or sustained by any person, persons, or property by reason of any act of the Contractor, Subcontractor, its agents or employees, in the performance of the contract.

Safety and Accident Protection

In accordance with 107-22 of the *Standard Specifications*, The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

BANKRUPTCY

The Department of Transportation, at its option, may terminate the contract upon the filing by the contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

EXTENSION OF CONTRACT TIME

Failure on the part of the Contractor to furnish bonds or certifications or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer with detailed justification within thirty (30) days after receipt of the final invoice payment. The failure of the Contractor to submit the claim(s) within thirty days shall be a bar to recovery.

CONTRACTOR CLAIM SUBMITTAL FORM

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the Contractor Claim Submittal Form (CCSF) available through the Construction Unit or http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

AWARD LIMITS ON MULTIPLE PROJECTS

(Project Number)	(County)
(Project Number)	(County)
(Project Number)	(County)
(Project Number)	(County)
If a Proposer desires to limit the total attention at the space provided about	amount of work awarded to him in this letting, he share in the second line of this form.
otal value of which is more that the abo	we are) the successful bidder on indicated projects, the stipulated award limits, the Board of Transportation those indicated which have a total value not exceeding

be authorized to sign this form.

**Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall

SUBSURFACE INFORMATION

There is no subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

PROSECUTION AND PROGRESS

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The contractor will not be permitted to suspend his operations except for reasons beyond his control except where the Engineer has authorized a suspension of the contractor's operations in writing.

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the *Standard Specifications*.

MAINTENANCE OF PROJECT

The Contractor shall be responsible for maintaining the project as directed by Section 104-10 in the 2006 Standard Specifications.

TEMPORARY SUSPENSION OF WORK

In accordance with Article 108-7 of the 2006 Standard Specifications, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

- 1. Conditions considered unfavorable for the suitable prosecution of the work, or
- 2. The Contractor's failure for correct conditions unsafe for workmen or the general public, or
- 3. The Contractor has not carried out orders given to him by the Engineer, or
- 4. The Contractor's failure to perform any provisions of the contract.

No extension of the completion date will be allowed for the above suspensions except as may be provided for in Article 108-10.

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 11, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

APPROVAL OF PERSONNEL

The State shall have the right to approve or reject the project engineer and other supervisory personnel, assigned to a project.

The Engineers or any subcontractor for the Engineers which are employed to provide engineering services for this project shall not engage the services of any person or persons, now in the employment of the State during the time of this Agreement, without written consent of the State.

In the event of engagement, the Engineers or their subcontractors shall restrict such person or persons from working on any of the Engineers' contracted projects in which the person or persons were formerly involved while employed by the State. This restriction period shall be for the duration of the contracted project with which the person or persons was involved. "Involvement" shall be defined as active participation in any of the following activities:

- Drafting the contract;
- Defining the scope of the contract;
- Selection of the Engineers' firm for services;
- Negotiation of the cost of the contract (including calculating man-hours or fees); and
- Administration of the contract.

An exception to these terms may be granted when recommended by the Secretary and approved by the Board of Transportation. Failure to comply with the terms stated above in this section shall be grounds for termination of this contract.

SUPERVISION BY CONTRACTOR

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully

authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

CONTRACTOR PERSONNEL

The Department will not be responsible in any way to the Contractor's personnel for damages, destruction or loss, from any cause, to the Contractor's equipment, supplies, materials or tools or the personal property of the Contractor's personnel. The Contractor will be responsible for all repairs, regardless of cost, resulting from the negligence of the Contractor or Contractor's employees. The Department will not participate in the cost of such repairs.

INSPECTION

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the *Standard Specifications*_and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project under construction.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the *Standard Specifications*. Material that is not properly certified will not be accepted.

Delivery tickets for all asphalt material shall be furnished in accordance with Section 106-7 of the *Standard Specifications* and shall include the following information:

- NCDOT Work Order Number
- Date
- Time issued
- Type of Material
- Gross weight
- Tare Weight
- Net weight of material
- Plant Location
- Truck Number
- Contractor's name
- Public weigh-master's stamp or number
- Public weigh-master's signature or initials in ink
- NCDOT Job Mix Formula Number
- NCDOT Asphalt Plant Certification Number

OUTSOURCING OUTSIDE THE USA

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

PLAN, DETAIL AND QUANTITY ADJUSTMENTS

The Department reserves the right to make, at any time during the progress of the work, such alterations in plans or the details of construction as may be found necessary or desirable by the Engineer to complete the project.

SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-22 of the *Standard Specifications*, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to

protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel shall wear a reflective vest or outer garment conforming to the requirements of MUTCD at all times while on the project.

POSTED WEIGHT LIMITS

The Contractor's attention is directed to the fact that many primary and secondary roads and bridges are posted with weight limits less than the legal limit. The Contractor will not be allowed to exceed the posted weight limits in transporting materials or equipment to the project. The Contractor should make a thorough examination of all maps and haul routes on this project.

COOPERATION BETWEEN CONTRACTORS

The Contractor's attention is directed to Article 105-7 of the Standard Specifications.

The Contractor on this project shall cooperate with Contractor(s) and state forces working within or adjacent to the limits of this project to the extent that the work can be carried out to the best advantage of all concerned.

ACT OF GOD

Revise the 2006 Standard Specifications as follows:

Page 1-69, 107-18 Contractor's Responsibility for Work, in the first paragraph, last sentence, replace the word *legally* with the word *contractually*.

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

The Contractor shall coordinate any work with the individual utility companies, prior to any debris removal that may directly affect the utilities.

GIFTS FROM VENDORS AND CONTRACTORS

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S.* § 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

BY:	(Signature)TITLE:	
DATE:		
, <u>.</u>		
(Printed name)		

Special Provisions

SPECIAL NOTES TO CONTRACTOR

• Refer to the Standard Specifications for Roads and Structures and Roadway Standard Drawings dated July 2006 and the Contract Special Provisions contained herein for guidelines on this project.

PRECONSTRUCTION CONFERENCE

The Contractor shall contact **Greg Johnston of the Elkin District Engineer's Office at (336)-835-4241** to arrange a Pre-construction conference. The project superintendent is required to attend the Pre-construction conference.

NOTIFICATION OF OPERATIONS

The Contractor or their appointed representative shall notify the Engineer one week in advance of beginning work on any site included in this contract. The Contractor shall give the Engineer sufficient notice of all operations for any sampling or acceptance testing required.

CONTRACT BID QUANTITIES

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of any item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Contractor's pricing shall be based on the estimated quantities per Division. These estimated amounts are submitted to assist contractors in the bidding process. Estimated quantities are not to be regarded as actual requirements. The State shall not be obligated to purchase any specific quantity.

DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project.

The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract.

COMPREHENSIVE GRADING

The work covered by this section consists of all elements of work covered by Section 200 Clearing and Grubbing, Section 225 Roadway Excavation, Section 230 Borrow Excavation, Section 235 Embankments, Section 240 Ditch Excavation, Section 250 Removal of Existing Pavement, Section 500 Fine Grading Sub-grade, Shoulders, and Ditches, and Section 560 Shoulder Construction, except that the requirements of the above-referenced sections pertaining to measurement and payment will not apply unless specific reference is made to such Specifications.

Partial payments will be equal to the percentage of such item that is complete as estimated by the Engineer. No separate payment will be made for clearing and grubbing or draining borrow sources as such work will be considered incidental to the work covered by this section.

Comprehensive Grading shall be performed in accordance with Section 226 of the 2006 Standard Specifications.

EMBANKMENTS

Revise the 2006 Standard Specifications as follows:

Page 2-22, Article 235-3 Materials, add the following as the second sentence of the second paragraph:

Aerate and dry material containing moisture content in excess of what is required to achieve embankment stability and specified density.

Page 2-22, Subarticle 235-4(B) Embankment Formation, add the following:

(16) Do not place rock or broken pavement in embankment areas where piles or drilled shaft foundations are to be constructed. This shall include but not be limited to piles and foundations for structures, metal signal poles, overhead sign structures, and high mount lighting.

PROOF ROLLING

Furnish and operate at the direction of the Engineer, a loaded tandem dump truck for testing the roadbed for stability and uniformity of compaction.

Provide equipment with the following features:

Tandem dump truck capable of hauling 15 tons.

After the roadbed has been completed to final grade, test the roadbed with 1 foot coverage, unless otherwise directed, with a tandem dump truck loaded with a minimum of 15 tons of Aggregate Base Course. Coverage is considered that stage in the rolling procedure when the entire width of the area being proof rolled has been in contact with the pneumatic tires of the dump truck. Operate the dump truck in a systematic manner so that the number of coverages over all areas to be proof rolled can be readily determined and recorded. Operate the equipment at a speed between 225 and 300 feet per minute. Perform proof rolling only in the presence of the Engineer. Proof roll areas again following the completion of the necessary corrections. Perform proof rolling at no cost to the Department if the corrections are necessary due to the negligence of the Contractor or weather. Protect all structural facilities on the project, such as but not limited to bridges, box culverts, pipe culverts, and utilities, from damage by the proof rolling equipment. Protection may include unloading and reloading of the dump truck, detouring, protective earth pads, or other suitable measure to avoid damage.

No direct payment will be made for proof rolling as required herein, as the cost of the same will be considered incidental to the work being paid for under the item of *Comprehensive Grading*.

All subgrade must be proof rolled and accepted by the Engineer prior to placement of Aggregate Base Course. Any placement of Aggregate Base Course on subgrade not approved by the Engineer will be subject to removal and or nonpayment or both. Corrective work necessary, as determined by proof rolling, and not due to negligence of the Contractor or to weather, will be paid for at the applicable contract unit prices or as extra work, whichever may be applicable. Payment includes furnishing all labor, equipment, fuel, and ballast for loading, loading and unloading ballast as directed, and increasing and decreasing tire pressure as directed.

SHOULDER AND FILL SLOPE MATERIAL

Description

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 226 of the *Standard Specifications* except as follows:

Construct the top 6 inches of shoulder and fill slopes with soils capable of supporting vegetation.

Provide soil with a P.I. greater than 6 and less than 25 and with a pH ranging from 5.5 to 6.8. Remove stones and other foreign material 2 inches or larger in diameter. All soil is subject to test and acceptance or rejection by the Engineer.

Obtain material from within the project limits or approved borrow source.

Measurement and Payment

No direct payment will be made for this work, as the cost of this work will be considered to be a part of the work being paid for at the contract lump sum price for "Comprehensive Grading".

DRAINAGE PIPE

Description

Where shown in the plans the Contractor may use Reinforced Concrete Pipe, Aluminum Alloy Pipe, Aluminized Corrugated Steel Pipe, HDPE Pipe, or PVC pipe in accordance with the following requirements.

Material

Item	Section
Corrugated Aluminum Alloy Pipe	1032-2(A)
Aluminized Corrugated Steel Pipe	1032-3(A)(7)
Corrugated Polyethylene Pipe (HDPE)	1032-10
Reinforced Concrete Pipe – Class II or III	1032-9(C)
Polyvinyl-Chloride (PVC)	1032-11
Elbows	1032

Corrugated Steel Pipe will not be permitted in counties listed in the contract documents.

Only pipe with smooth inside walls will be allowed for storm drain systems. Storm drain systems are defined as pipe under curb and gutter, expressway gutter, and shoulder berm gutter that connects drainage structures and is not open ended.

Construction Methods

Pipe Culverts shall be installed in accordance with the contract documents.

Where allowed by the plans, use any of the several alternate pipes shown herein, but only one type of pipe and elbow will be permitted between drainage structures or for the entire length of a cross line pipe.

Measurement and Payment

" Drainage	Pipe	will be	paid	for a	as the	actual	number	of	linear	feet	installed	and	accepted.
Measurement w	ill be i	n accor	dance	e with	the o	contrac	t docume	ents					

____" *Drainage Pipe Elbow* will be measured and paid for in units of each.

Payment	will	be	made	under:

Pay Item	Pay Unit
" Drainage Pipe	Linear Foot
" Drainage Pipe Elbow	Each

PIPE INSTALLATION AND PIPE CULVERTS

Revise the 2006 Standard Specifications as follows:

Replace Section 300 and Section 310 with the following:

SECTION 300 PIPE INSTALLATION

300-1 DESCRIPTION

Excavate, undercut, provide material, condition foundation, lay pipe, joint and couple pipe sections, and furnish and place all backfill material as necessary to install the various types of pipe culverts and fittings required to complete the project.

Install pipe in accordance with the detail in the plans.

Do not waste excavation unless permitted. Use suitable excavated material as backfill; or in the formation of embankments, subgrades, and shoulders; or as otherwise directed. Furnish disposal areas for the unsuitable material. The Engineer will identify excavated materials that are unsuitable.

Where traffic is to be maintained, install pipe in sections so that half the width of the roadway is available to traffic.

300-2 MATERIALS

Refer to Division 10:

Item	Section
Flowable Fill	1000
Select Materials	1016
Joint Materials	1032-9(G)
Engineering Fabrics	1056

Provide foundation conditioning material meeting the requirements of Article 1016-3 for Class V or VI Select Material as shown in the contract documents.

Provide bedding material meeting the requirements of Article 1016-3 for Class II (Type 1 only) or Class III Select Material as shown in contract documents.

Provide backfill material meeting the requirements of Article 1016-3 for Class II (Type 1 for Flexible Pipe) or Class III Select Material as shown in the contract documents.

Provide filter fabric meeting the requirements of Article 1056-2 for any type of engineering fabric.

Provide foundation conditioning fabric meeting the requirements of Article 1056-2 for Type 2 Engineering Fabric.

Do not use corrugated steel pipe in the following counties:

Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Currituck, Dare, Gates, Hertford, Hyde, Jones, Martin, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, and Washington.

300-3 UNLOADING AND HANDLING

Unload and handle pipe with reasonable care. Do not roll or drag metal pipe or plates over gravel or rock during handling. Take necessary precautions to ensure the method used in lifting or placing the pipe does not induce stress fatigue in the pipe. Use a lifting device that uniformly distributes the weight of the pipe along its axis or circumference. Repair minor damage to pipe when permitted. Remove pipe from the project that is severely damaged or is rejected as being unfit for use. Undamaged portions of a joint or section may be used where partial lengths are required.

300-4 PREPARATION OF PIPE FOUNDATION

Prepare the pipe foundation in accordance with the applicable method as shown in the contract documents, true to line and grade, and uniformly firm.

Camber invert grade an amount sufficient to prevent the development of sag or back slope in the flow line. The Contractor shall determine the amount of camber required and submit to the Engineer for approval.

Where material is found to be of poor supporting value or of rock and when the Engineer cannot make adjustment in the location of the pipe, undercut existing foundation material within the limits established on the plans. Backfill the undercut with foundation conditioning material. Encapsulate the foundation conditioning material with foundation conditioning fabric prior to placing bedding material. Overlap all transverse and longitudinal joints in the fabric at least 18 inches.

Maintain the pipe foundation in a dry condition.

300-5 INVERT ELEVATIONS

The proposed pipe culvert invert elevations shown on the Drainage Summary Sheets are based upon information available when the plans were prepared. If proposed invert elevations are adjusted during construction based upon actual conditions encountered, no claim for an extension of time for any reason resulting from this information will be allowed.

When a pipe culvert is to be installed in a trench and the average actual elevation of the pipe between drainage structures deviates from the average proposed elevation shown on the Drainage Summary Sheets by more than one foot a pay adjustment will be made as follows:

Pay Adjustment (per linear foot) = $[(APE-AAE)\pm 1 \text{ foot}]$ (0.15 X CUP)

Where: CUP = Contract Unit Price of Pipe Culvert

AAE = Average Actual Elevation (<u>Actual Inlet elev. + Actual Outlet elev.</u>)

2

APE = Average Plan Elevation (<u>Plan Inlet elev. + Plan Outlet elev.</u>)

2

When the actual location of a pipe culvert is changed from the location shown on the plans, the Engineer will make a pay adjustment deemed warranted based upon the relation of the pipe culvert as shown on the plans to the finished roadway and the relation of the pipe culvert as constructed to the finished roadway.

The top elevation column on the drainage summary sheet indicates the flow elevation at the top of structures intended to collect surface water.

The top elevation column on drainage structures not intended to collect surface water indicates the elevation at the top of the cover.

300-6 LAYING PIPE

The Department reserves the right to perform forensic testing on any installed pipe.

(A) Rigid Pipe

Concrete and welded steel pipe will be considered rigid pipe. Lay pipe on prepared foundation, bell or groove end upgrade with the spigot or tongue fully inserted. Check each joint for alignment and grade as the work proceeds.

Use flexible plastic joint material except when material of another type is specified in the contract documents. Joint material of another type may be used when permitted.

Repair lift holes in concrete pipe, if present. Thoroughly clean and soak the lift hole and completely fill the void with an approved non-shrink grout. Submit alternate details for repairing lift holes to the engineer for review and approval.

For all pipes 42 inches in diameter and larger, wrap filter fabric around all pipe joints. Extend fabric at least 12 inches beyond each side of the joint. Secure fabric against the outside of the pipe by methods approved by the Engineer.

(B) Flexible Pipe (Except Structural Plate Pipe)

Corrugated steel, corrugated aluminum, corrugated polyethylene (HDPE), and polyvinylchloride (PVC) pipe will be considered flexible pipe. Place flexible pipe carefully on the prepared foundation starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points.

Handle coated corrugated steel pipe with special care to avoid damage to coatings.

Join pipe sections with coupling band, fully bolted and properly sealed. Provide coupling bands for annular and helical corrugated metal pipe with circumferential and longitudinal strength sufficient to preserve the alignment, prevent separation of the sections, and prevent backfill infiltration. Match-mark all pipe 60 inches or larger in diameter at the plant for proper installation on the project.

At locations indicated in the plans, corrugated steel pipe sections shall be jointed together with rod and lug coupling bands, fully bolted. Sleeve gaskets shall be used in conjunction with rod and lug couplings and the joints properly sealed. Coupling bands shall provide circumferential and longitudinal strength sufficient to preserve the alignment, prevent separation of the sections and prevent infiltration of backfill material.

300-7 BEDDING AND BACKFILLING

Loosely place bedding material, in a uniform layer, a depth equal to the inside diameter of the pipe divided by 6 or 6 inches, whichever is greater. Leave bedding material directly beneath the pipe uncompacted and allow pipe seating and backfill to accomplish compaction. Excavate recesses to receive the bells where bells and spigot type pipe is used.

Place fill around the pipe in accordance with the applicable method shown on the plans in layers not to exceed 6 inches loose unless otherwise permitted. Compact to the density required by Subarticle 235-4(C). Approval of the backfill material is required prior to its use. Use select material as shown in the contract documents.

Take care during backfill and compaction operations to maintain alignment and prevent damage to the joints. Keep backfill free from stones, frozen lumps, chunks of highly plastic clay, or other objectionable material. Grade and maintain all pipe backfill areas in such a condition that erosion or saturation will not damage the pipe foundation or backfill.

Excavatable flowable fill may be used for backfill when approved by the Engineer. When using excavatable flowable fill, ensure that the pipe is not displaced and does not float during backfill. Submit methods for supporting the pipe and material placement to the Engineer for review and approval.

Do not operate heavy equipment over any pipe until it has been properly backfilled with a minimum 3 feet of cover. Place, maintain, and finally remove the required cover that is above the proposed finished grade at no cost to the Department. Remove and replace, at no cost to the Department, pipe that becomes misaligned, shows excessive settlement, or has been otherwise damaged by the Contractor's operations.

300-8 INSPECTION AND MAINTENANCE

Prior to final acceptance, the Engineer will perform random video camera and or mandrel inspections to ensure proper jointing and that deformations do not exceed allowable limits. Replace pipes having cracks greater than 0.1 inches or deflections greater than 7.5 percent. Repair or replace pipes with cracks greater than 0.01 inches, exhibiting displacement across a crack, exhibiting bulges, creases, tears, spalls, or delamination. Maintain all pipe installations in a condition such that they will function continuously from the time the pipe is installed until the project is accepted.

300-9 MEASUREMENT AND PAYMENT

General

No measurement will be made of any work covered by this section except as listed below. Removal and disposal of existing pavement is a part of the excavation for the new pipe culvert installation. Repair of the pavement will be made in accordance with Section 654.

Foundation Conditioning

Using Local Material

Undercut excavation is all excavation removed by undercutting below the bottom of the trench as staked. *Undercut Excavation* will be measured as the actual number of cubic yards of undercut excavation, measured in its original position and computed by the average end area method, that has been removed as called for in the contract and will be paid for at double the contract unit price for *Unclassified Excavation* as provided in Article 225-7.

Local material used for conditioning the foundation will be measured and paid for in accordance with Article 225-7 for *Unclassified Excavation* or in accordance with Article 230-5 for *Borrow Excavation* depending on the source of the material.

Local material used to replace pipe undercut excavation will be measured and paid for in accordance with Article 225-7 or Article 230-5.

Using Other Than Local Material

No measurement and payment will be made for *Undercut Excavation*. The material used to replace pipe undercut excavation will be classified as foundation conditioning material.

Foundation Conditioning Material, Minor Structures will be measured and paid for as the actual number of tons of this material weighed in trucks on certified platform scales or other certified weighing devices.

No direct payment will be paid for undercut excavation. Payment at the contract unit price for *Foundation Conditioning Material*, *Minor Structures* will be full compensation for all work of pipe undercut excavation.

Foundation Conditioning Fabric

Foundation Conditioning Fabric will be measured and paid for in square yards. The measurement will be based on the theoretical calculation using length of pipe installed and two times the standard trench width. No separate measurement will be made for overlapping fabric or the vertical fabric dimensions required to encapsulate the foundation conditioning material.

Bedding and Backfill - Select Material

No measurement will be made for select bedding and backfill material required in the contract documents. The select bedding and backfill material will be included in the cost of the installed pipe.

Where unclassified excavation or borrow material meets the requirements for select bedding and backfill and is approved for use by the Engineer, no deductions will be made to these pay items to account for use in the pipe installation.

Payment will be made under:

Pay ItemPay UnitFoundation Conditioning Material, Minor StructuresTonFoundation Conditioning FabricSquare Yard

SECTION 310 PIPE CULVERTS

310-1 DESCRIPTION

Furnish and install drainage pipe at locations and size called for in the contract documents. The work includes construction of joints and connections to other pipes, endwalls, and drainage structures.

310-2 MATERIALS

Refer to Division 10:

Item	Section
Plain Concrete Pipe Culvert	1032-9(B)
Reinforced Concrete Pipe Culvert	1032-9(C)
Precast Concrete Pipe End Sections	1032-9(D)
Concrete Pipe Tees and Elbows	1032-9(E)
Corrugated Aluminum Alloy Pipe Culvert	1032-2(A)
Corrugated Aluminum Alloy Pipe Tees and Elbows	1032-2(B)
Corrugated Steel Culvert Pipe and Pipe Arch	1032-3(A)
Prefabricated Corrugated Steel Pipe End Sections	1032-3(B)
Corrugated Steel Pipe Tees and Elbows	1032-3(C)
Corrugated Steel Eccentric Reducers	1032-3(D)
HDPE Smooth Lined Corrugated Plastic Pipe	1032-10
Polyvinylchloride (PVC) Pipe	1032-11

Suppliers that provide metal pipe culverts, fittings, and all other accessories covered by this section shall meet the requirements of the Department's Brand Certification program for metal pipe culverts, and be listed on the Department's pre-approved list for suppliers of metal pipe culvert.

Do not use corrugated steel pipe in the following counties:

Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Currituck, Dare, Gates, Hertford, Hyde, Jones, Martin, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrell, and Washington.

310-3 PIPE INSTALLATION

Install pipe, pipe tees, and elbows in accordance with Section 300.

310-4 SIDE DRAIN PIPE

Side drain pipe is defined as storm drain pipe running parallel to the roadway to include pipe in medians, outside ditches, driveways, and under shoulder berm gutter along outside shoulders greater than 4 feet wide.

Where shown in the plans, side drain pipe may be Class II Reinforced Concrete Pipe, aluminized corrugated steel pipe, corrugated aluminum alloy pipe, HDPE pipe, or PVC pipe. Corrugated steel pipe is restricted in the counties listed in Article 310-2. Install side drain pipe in accordance to Section 300. Cover for side drain pipe shall be at least one foot.

310-5 PIPE END SECTIONS

Choose which material to use for the required end sections. Both corrugated steel and concrete pipe end sections will work on concrete pipe, corrugated steel pipe, and HDPE smooth lined corrugated plastic pipe.

310-6 MEASUREMENT AND PAYMENT

Pipe will be measured and paid as the actual number of linear feet of pipe that has been incorporated into the completed and accepted work. Measurement of pipe will be made by counting the number of joints used and multiplying by the length of the joint to obtain the number of linear feet of pipe installed and accepted. Measurements of partial joints will be made along the longest length of the partial joint to the nearest 0.1 foot. Select bedding and backfill material will be included in the cost of the installed pipe.

Pipe End Sections, Tees, Elbows, and *Eccentric Reducers* will be measured and paid as the actual number of each of these items that have been incorporated into the completed and accepted work.

Payment will be made under:

Pay Item	Pay Unit
" R.C. Pipe Culverts, Class	Linear Foot
" x" x" R.C. Pipe Tees, Class	Each
" R.C. Pipe Elbows, Class	Each
" C.A.A. Pipe Culvert," Thick	Linear Foot
" x" x" C.A.A. Pipe Tees," Thick	Each
" C.A.A. Pipe Elbows," Thick	Each
" C.S. Pipe Culverts," Thick	Linear Foot
" x" C.S. Pipe Arch Culverts," Thick	Linear Foot
x" x" C.S. Pipe Tees," Thick	Each
" C.S. Pipe Elbows," Thick	Each
" x" C.S. Eccentric Reducers," Thick	Each
" HDPE Pipe	Linear Foot
" PVC Pipe	Linear Foot

" Side Drain Pipe	Linear Foot
" Side Drain Pipe Elbows	Each
" Pipe End Section	Each

FINE GRADING SUBGRADE, SHOULDERS AND DITCHES

Revise the 2006 Standard Specifications as follows:

Page 5-1, Article 500-1 Description, replace the first sentence with the following:

Perform the work covered by this section including but not limited to preparing, grading, shaping, manipulating moisture content, and compacting either an unstabilized or stabilized roadbed to a condition suitable for placement of base course, pavement, and shoulders.

AGGREGATE BASE COURSE

Revise the 2006 Standard Specifications as follows:

Page 5-11, Article 520-5 Hauling and Placing Aggregate Base Material, 6th paragraph, replace the first sentence with the following:

Base course that is in place on November 15 shall have been covered with a subsequent layer of pavement structure or with a sand seal. Base course that has been placed between November 16 and March 15 inclusive shall be covered within 7 calendar days with a subsequent layer of pavement structure or with a sand seal.

INCIDENTAL STONE BASE

Description

Place incidental stone base on driveways, mailboxes, etc. only with permission of the Engineer. Any incidental stone base required for this project shall be placed only after approval has been granted.

Materials and Construction

Provide and place incidental stone base in accordance with the requirements of Section 545 of the 2006 Standard Specifications.

Measurement and Payment

Incidental Stone Base will be measured and paid for in accordance with Article 545-6 of the 2006 Standard Specifications.

AGGREGATE PRODUCTION

Provide aggregate from a producer who uses the current Aggregate Quality Control/Quality Assurance Program, which is in effect at the time of shipment.

No price adjustment is allowed to contractors or producers who use the program. Participation in the program does not relieve the producer of the responsibility of complying with all requirements of the *Standard Specifications*. Copies of this procedure are available upon request from the Materials and Test Unit.

DISPOSAL OF WASTE AND DEBRIS

The work covered by this section consists of the disposal of waste and debris in accordance with the requirements of Section 802 of the 2006 Standard Specifications.

Debris will be considered to be all undesirable material encountered on the project.

Materials placed in non-permitted disposal areas will be limited to clean soil, rock, concrete, brick, other inert materials, and bituminous asphalt when placed at least 4 feet above the water table. Mixtures of soil and vegetation, which are primarily soil, may also be placed in non-permitted disposal areas. All other debris shall be placed in sites, which have been permitted by the Solid Waste Management Division of the North Carolina Department of Environment, Health and Natural Resources unless otherwise permitted by the Engineer.

On sites other than permitted public waste or disposal areas, the Contractor shall maintain the earth surfaces of all waste areas, both during the work and after the completion of all seeding and mulching or other erosion control measures specified, and until final acceptance of the project in a manner that will effectively control erosion and siltation.

The following requirements shall also be applicable to all waste or disposal areas other than active public waste or disposal sites which have been permitted by the Solid Waste Management Division of the North Carolina Department of Environment, Health and Natural Resources: (1) The Contractor and Property Owner shall jointly submit a Development, Use, and Reclamation Plan for each waste or Disposal area that he proposes to utilize. The plan shall address the following: (a) Drainage - The waste or disposal area shall be shaped to drain such that no water will collect or stand and a functioning drainage system shall be provided. (b) Slopes -Rock and earth waste shall be shaped to contours, which are compatible to and blend with the adjacent topography. All rock shall be covered with a minimum 6 inch layer of earth material either from

project waste or from borrow. As an exception, side slopes constructed of all rock material will not require earth covering. (c) Construction Debris - Construction debris and all broken pavement and masonry shall be covered with a minimum 6 inch thick layer of earth waste material from the project or borrow. The completed waste area shall be shaped as required above for disposal of earth or rock waste. (d) Erosion Control - The plan shall address temporary and permanent measures that the contractor intends to employ during use of the site and as a part of the reclamation. Unless considered impractical due to special circumstances, the Contractor's plan shall provide for the use of staged permanent seeding and mulching and appropriate fertilizer top-dressing on a continual basis during site use and the immediate total reclamation of the site when the site is no longer needed. (2) Where the Engineer has granted permission to dispose of waste and debris within the right of way, the Engineer will have the authority to establish whatever additional requirements may be necessary to insure the satisfactory appearance of the completed project.

Where the Contractor elects to dispose of waste or debris in active public waste or disposal sites, he shall provide evidence satisfactory to the Engineer that the proposed area or site has been permitted by the Solid Waste Management Division of the North Carolina Department of Environment, Health and Natural Resources.

Disposal of Waste and Debris will not be allowed in any area under the Corps of Engineers' regulatory jurisdiction until the Contractor has obtained a permit for such disposal from the Corps District Engineer having jurisdiction and has furnished a copy of this permit to the District Engineer.

Payment for the work of seeding and mulching of waste and disposal areas will be made at the contract unit price for seeding and mulching. All other work required for erosion and sedimentation control will be considered incidental to the work and no direct payment will be made.

Except as otherwise provided above, no direct payment will be made for the work covered by this section. Payment at the contract prices for the various items in the contract will be full compensation for all work covered by this section including, but not limited to, furnishing any waste areas; providing and implementing a Development, Use, and Reclamation Plan; any right of access to waste areas; disposing of waste and debris; dressing and shaping of waste areas; furnishing and spreading earth material over debris, rock, broken payement, and masonry; clearing and grubbing of waste areas; and hauling waste and debris to waste areas or permitted areas and landfills.

BORROW AND WASTE SITE RECLAMATION PROCEDURES

The Department's Borrow and Waste Site Reclamation Procedures for Contracted Projects have been revised and are available on the website at:

http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/fieldops/downloads/

In accordance with Article 230-4 and Section 802 of the 2006 Standard Specifications, the Contractor shall utilize these revised procedures for all borrow and waste sites on this project.

BORROW EXCAVATION AND SHPO DOCUMENTATION FOR BORROW/WASTE SITES

Revise the 2006 Standard Specifications as follows:

Division 2 Earthwork

Page 2-16, Subarticle 230-1(D), add the words: The Contractor specifically waives as the first words of the sentence.

Page 2-17, Article 230-4(B) Contractor Furnished Sources, first paragraph, first sentence replace with the following:

Prior to the approval of any borrow sources developed for use on any project, obtain certification from the State Historic Preservation Officer of the State Department of Cultural Resources certifying that the removal of the borrow material from the borrow sources(s) will have no effect on any known district, site building, structure, or object, architectural and/or archaeological that is included or eligible for inclusion in the National Register of Historic Places.

Division 8 Incidentals

Page 8-9, Article 802-2 General Requirements, add the following as the 1st paragraph:

Prior to the removal of any waste from any project, obtain certification from the State Historic Preservation Officer of the State Department of Cultural Resources certifying that the deposition of the waste material to the proposed waste area will have no effect on any known district, site building, structure, or object, architectural and/or archaeological that is included or eligible for inclusion in the National Register of Historic Places. Furnish a copy of this certification to the Engineer prior to performing any work in the proposed waste site.

Page 8-10, Article 802-2, General Requirements, 4th paragraph, add the following as the 2nd sentence:

The Department's borrow and waste site reclamation procedures for contracted projects is available on the NCDOT website and shall be used for all borrow and waste sites on this project.

CULVERT PIPE

Revise the *Standard Specifications for Roads and Structures* as follows:

Page 10-67, Article 1032-1, replace (A), (B), (C), (D), (E) and (F) with the following:

- (A) Coated corrugated metal culvert pipe and pipe arches.
- (B) Coated corrugated metal end sections, coupling band, and other accessories
- (C) Corrugated aluminum alloy structural plate pipe and pipe arches
- (D) Corrugated aluminum alloy end sections, coupling band, and other accessories
- (E) Welded steel pipe

Page 10-69, Subarticle 1032-3(A)(5) Coating Repair, replace with the following:

Repair shall be in accordance with Section 1076-6 of the *Standard Specifications*.

Subarticle 1032-3(A)(7) Aluminized Pipe, replace with the following:

Aluminized pipe shall meet all requirements herein, except that the pipe and coupling bands shall be fabricated from aluminum coated steel sheet meeting the requirements of AASHTO M274.

Page 10-71, Article 1032-4 Coated Culvert Pipe, replace (A), (1), (2), (3), (4), (B), (C), (D), (E), (F) and (G) with the following:

(A) Coatings for Steel Culvert Pipe or Pipe Arch

The below coating requirements apply for steel culvert pipe, pipe arch, end sections, tees, elbows, and eccentric reducers.

- (1) Steel Culvert pipe shall have an aluminized coating, meeting the requirement of AASHTO M274
- (2) When shown on the plans or as approved by the Engineer, a polymeric coating meeting the requirements of AASHTO M246 for Type B coating may be substituted for aluminized coating.

(B) Acceptance

Acceptance of coated steel culvert pipe, and its accessories will be based on, but not limited to, visual inspections, classification requirements, check samples taken from material delivered to the project, and conformance to the annual Brand Registration.

Page 10-73, Article 1032-5, sixth paragraph, third sentence, remove the word "spelter"

Page 10-74, 1032-7 Vitrified Clay Culvert Pipe, delete section in its entirety.

Page 10-75, Article 1032-8 Welded Steel Pipe, change title to WELDED STEEL PIPE FOR DRAINAGE

Subarticle 1032-9(B) Plain Concrete Culvert Pipe, delete section in its entirety.

Page 10-77, Article 1032-10 Corrugated Polyethylene Culvert Pipe, change title to CORRUGATED POLYETHYLENE (HDPE) CULVERT PIPE

Add the following: Article 1032-11 Polyvinyl Chloride (PVC) Pipe

Polyvinyl Chloride pipe shall conform to AASHTO M 304 or ASTM 949. When rubber gaskets are to be installed in the pipe joint, the gasket shall be the sole element relied on to maintain a tight joint. Test pipe joints at the plant hydrostatically using test methods in ASTM D 3212. Soil tight joints shall be watertight to 13.8 kPa. Watertight joints shall be watertight to 34.5 kPa unless a higher pressure rating is specified in the plans.

TRAFFIC CONTROL

Maintain traffic in accordance with Divisions 10, 11 and 12 of the *Standard Specifications*, the latest revisions thereto and the following provisions:

Use a lane closure (refer to the *Roadway Standard Drawings* Nos. 1101.02, 1101.11, 1110.02, 1130.01 and details for the Advance Work Zone signing in contract) or a slow-moving operation as shown in details of this contract. Use a moving operation only if the minimum speed maintained at all times is 3 mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to Attached Details and the *Roadway Standard Drawings* Nos. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, 1170.01 and 1180.01 when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly ballasted cones may be used instead of drums for lane closures during daylight hours. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 3 miles in length at any given time unless otherwise directed by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting.

Replace any obliterated markings as required by other sections of the *Standard Specifications* and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane, close the nearest open travel lane using the *Roadway Standard Drawings* No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working on the shoulder, adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using the *Roadway Standard Drawings* No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, *Roadway Standard Drawings* or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within 15 feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches. Install advance warning UNEVEN LANES signs (W8-11 at 48" X 48") 500 feet in advance and a minimum of once every half mile throughout the uneven area.

Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an open travel lane that has an edge of pavement drop-off as follows:

- (A) Drop-off that exceeds 2 inches on roadways with posted speed limits of 45 mph or greater
- (B) Drop-off that exceeds 3 inches on roadways with posted speed limit less than 45 mph. Backfill the unacceptable drop-off with suitable compacted material, as approved by the Engineer, at no expense to the Department. This work is not considered part of shoulder reconstruction.

When utilizing a slow-moving operation for such items as pavement marking placement, pavement marker installation and pesticide spraying, the slow moving operation caravan shall consist, as a minimum, of the vehicles and devices shown on the Moving Operation Caravan Detail(s) herein. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

Maintain vehicular access in accordance with Section 1101-13 of the *Standard Specifications* using suitable backfill material approved by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Do not cross medians with equipment, except at properly designated interchanges.

No direct payment will be made for the signing and traffic control items including Truck Mounted Impact Attenuators (TMIA - see Section 1165 of the *Standard Specifications* and the *Roadway Standard Drawings*). This work will be considered incidental to the various other bid items in the contract.

WORK ZONE SIGNING

Description

Install and maintain signing in accordance with Divisions 11 and 12 of the *Standard Specifications*, the *Roadway Standard Drawings* and the following provisions:

Furnish, install, maintain, and remove advance warning work zone signs and any required lane closure signing.

Furnish, install, and maintain general work zone warning signs for resurfacing and milling such as ROUGH ROAD (W8-8 at 48" X 48") (for milling only), UNEVEN LANES (W8-11 at 48" X 48"), LOW SHOULDER (W8-9 at 48" X 48"), LOW / SOFT SHOULDER (DOT No. 16-79860 at 48" X 48"), UNMARKED PAVEMENT AHEAD (DOT No. 116087130 at 48" X 48") and DO NOT PASS (R4-1 at 24" X 30"). When construction is completed in any area of the project, relocate signs to the next work site, as directed by the Engineer. Remove these signs at the completion of the project.

All work zone signs may be portable.

Construction Methods

(A) General

Install all warning work zone signs before beginning work on a particular map. If signs are installed three days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each work zone warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

(B) Advance Warning Work Zone Signs

Install advance warning work zone signs (see attached Details and the *Roadway Standard Drawings* Nos. 1101.02 and 1110.01 and advance signing details) prior to beginning of work and remove upon final completion of the project. If there is a period of construction inactivity longer than two weeks, remove or cover advance warning work zone signs. Uncover advance warning work zone signs no more than 3 days before work resumes. All other operations could be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

(C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the *Roadway Standard Drawings* Nos. 1101.02, 1101.11 and 1110.02.

(D) General Work Zone Warning Signs

Install general work zone warning signs for resurfacing and milling such as ROUGH ROAD (W8-8 at 48" X 48") (for milling only), UNEVEN LANES (W8-11 at 48" X 48"), LOW SHOULDER (W8-9 at 48" X 48") and LOW / SOFT SHOULDER (W8-9B at 48" X 48") at 1 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer.

Install the LOW SHOULDER (W8-9 at 48" X 48") or LOW / SOFT SHOULDER (DOT No. 16-79860 at 48" X 48") signs prior to any resurfacing in an area where shoulder construction will be performed.

Install general work zone warning signs such as UNMARKED PAVEMENT AHEAD (DOT No. 116087130 at 48" X 48") and DO NOT PASS (R4-1 at 24" X 30") alternately at 1/2 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer. Install signs prior to the obliteration of any pavement markings.

Measurement and Payment

No direct payment will be made for *Work Zone Signing* as such work will be considered incidental to the various other bid items in the contract.

WORK ZONE TRAFFIC CONTROL

Revise the 2006 Standard Specifications as follows:

Page 11-3, Article 1101-12 Traffic Control Supervision, in addition to the stated requirements, add the following:

Provide the service of at least one qualified Work Zone Supervisor. The Work Zone Supervisor shall have the overall responsibility for the proper implementation of the traffic management plan, as well as ensuring all employees working inside the NCDOT Right of Way have received the proper training appropriate to the job decisions each individual is required to make.

The work zone supervisor is not required to be on site at all times but must be available to address concerns of the Engineer. The name and contact information of the work zone supervisor shall be provided to the Engineer prior to or at the preconstruction conference.

Qualification of Work Zone Supervisors shall be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage, http://www.ncdot.gov/doh/preconstruct/wztc/.

Page 11-13, Article 1150-3 Construction Methods, replace the article with the following:

Provide the service of properly equipped and qualified flaggers (see *Roadway Standard Drawings* No. 1150.01) at locations and times for such period as necessary for the control and protection of vehicular and pedestrian traffic. Anyone who controls traffic is required to be qualified. Qualification consists of each flagger receiving proper training in the set-up and techniques of safely and competently performing a flagging operation. Qualification of flaggers is to be done at an NCDOT approved training agency. For a complete listing of these, see the Work Zone Traffic Control's webpage, http://www.ncdot.gov/doh/preconstruct/wztc/.

Prior to beginning work on the project, a Qualification Statement that all flaggers used on the project have been properly trained through an NCDOT approved training resource shall be provided to the Engineer.

Flagging operations are not allowed for the convenience of the Contractor's operations. However, if safety issues exist (i.e. sight or stopping sight distance), the Engineer may approve the use of flagging operations. Use flagging methods that comply with the guidelines in the MUTCD.

PERMANENT SOIL REINFORCEMENT MAT

Description

This work consists of furnishing and placing *Permanent Soil Reinforcement Mat*, of the type specified, over previously prepared areas as directed.

Materials

The product shall be a permanent erosion control reinforcement mat and shall be constructed of synthetic or a combination of coconut and synthetic fibers evenly distributed throughout the mat between a bottom UV stabilized netting and a heavy duty UV stabilized top net. The matting shall be stitched together with UV stabilized polypropylene thread to form a permanent three-dimensional structure. The mat shall have the following minimum physical properties:

Property	Test Method	Value	Unit
Light Penetration	ASTM D6567	9	%
Thickness	ASTM D6525	0.40	in
Mass Per Unit Area	ASTM D6566	0.55	lb/sy
Tensile Strength	ASTM D6818	385	lb/ft
Elongation (Maximum)	ASTM D6818	49	%
Resiliency	ASTM D1777	>70	%
UV Stability *	ASTM D4355	>80	%
Porosity (Permanent Net)	ECTC Guidelines	>85	%
Maximum Permissible Shear	Performance Bench	>8.0	lb/ft2
Stress (Vegetated)	Test		
Maximum Allowable Velocity	Performance Bench	>16.0	ft/s

(Vegetated) Test

*ASTM D1682 Tensile Strength and % strength retention of material after 1000 hours of exposure.

Submit a certification (Type 1, 2, or 3) from the manufacturer showing:

- (A) the chemical and physical properties of the mat used, and
- (B) conformance of the mat with this specification.

Construction Methods

Matting shall be installed in accordance with Subarticle 1631-3(B) of the Standard Specifications.

All areas to be protected with the mat shall be brought to final grade and seeded in accordance with Section 1660 of the *Standard Specifications*. The surface of the soil shall be smooth, firm, stable and free of rocks, clods, roots or other obstructions that would prevent the mat from lying in direct contact with the soil surface. Areas where the mat is to be placed will not need to be mulched.

Measurement and Payment

Permanent Soil Reinforcement Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which Permanent Soil Reinforcement Mat is installed and accepted. Overlaps will not be included in the measurement, and will be considered as incidental to the work. Such payment shall be full compensation for furnishing and installing the mat, including overlaps, and for all required maintenance.

Payment will be made under:

Pay Item Pay Unit

Permanent Soil Reinforcement Mat Square Yard

COIR FIBER BAFFLE

Description

Furnish material, install and maintain coir fiber baffles according to the details in the plans or in locations as directed. Coir Fiber Baffles shall be installed in silt basins and sediment dams at drainage outlets. Work includes providing all materials, placing, securing, excavating and backfilling of *Coir Fiber Baffles*.

Materials

(A) Coir Fiber Mat

Matting: Provide matting to meet the following requirements:

100% coconut fiber (coir) twine woven into high strength matrix

Thickness - 0.30 in. minimum

Tensile Strength 1348 x 626 lb/ft minimum

Elongation 34% x 38% maximum

Flexibility (mg-cm) 65030 x 29590

Flow Velocity Observed 11 ft/sec

Weight 20 oz/SY

Size 6.6 x 164 ft (120 SY)

"C" Factor 0.002

Open Area (measured) 50%

(B) Staples

Provide staples made of 0.125 in. diameter new steel wire formed into a *u* shape not less than 12" in length with a throat of 1" in width.

(C) Posts

Steel posts shall be at least 5 ft. in length, approximately 1 3/8" wide measured parallel to the fence, and have a minimum weight of 1.25 lb/ft of length. The post shall be equipped with an anchor plate having a minimum area of 14.0 square inches, and shall be of the self-fastener angle steel type to have a means of retaining wire and coir fiber mat in the desired position without displacement.

(D) Wire

Provide 8-gauge wire strand of variable lengths.

Construction Methods

Place the coir fiber baffles immediately upon excavation of basins. Install three (3) baffles in basins with a spacing of one fourth (1/4) the basin length and according to the detail sheets. Two (2) coir fiber baffles shall be installed in basins less than 20 ft. in length with a spacing of one third (1/3) the basin length.

Steel posts shall be placed at a depth of 2 ft. below the basin surface, with a maximum spacing of 4 ft. Attach an 8-gauge wire strand to the steel posts at a height of 3 ft. with plastic ties or wire fasteners. Install a steel post into side of the basin at a variable depth and a height of 3 ft. from the bottom of the basin to anchor coir fiber mat. Secure anchor post to the upright steel post in basin with wire fasteners.

The coir fiber mat shall be draped over the wire strand to a minimum of 3 ft. of material on each side of the strand. Secure the coir fiber mat to the wire strand with plastic ties or wire fasteners.

Place staples across the matting at ends and junctions approximately 1 ft. apart at the bottom and side slopes of basin. Overlap matting at least 6" where 2 or more widths of matting are installed

side by side. Refer to details in the plan sheets. The Engineer may require adjustments in the stapling requirements to fit individual site conditions.

Measurement and Payment

Coir Fiber Baffles will be measured and paid for by the actual number of linear feet of coir fiber baffles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the coir fiber baffles.

Payment will be made under:

Pay ItemPay UnitCoir Fiber BaffleLinear Foot

WATTLES WITH POLYACRYLAMIDE (PAM)

Description

Wattles are tubular products consisting of excelsior fibers encased in polyethylene netting. Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Wattles are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of wattles, matting installation, PAM application, and removing wattles.

Materials

Wattle shall meet the following specifications:

100% Curled Wood(Excelsior) Fibers

Minimum Diameter 12 in.

Minimum Density 2.6 lb/ft₃ +/- 10%

Net Material Polyethylene

Net Openings 1 in. x 1 in.

Net Configuration Totally Encased

Minimum Weight 20 lb. +/- 10% per 10 ft. length

Anchors: Stakes shall be used as anchors.

Wooden Stakes: Provide hardwood stakes a minimum of 2-ft. long with a 2 in. x 2 in. nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving down into the underlying soil.

Matting shall meet the requirements of section 1060-8 of the *Standard Specifications*, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125" diameter new steel wire formed into a u shape not less than 12" in length with a throat of 1" in width.

Polyacrylamide (PAM) shall be applied in powder form and shall be anionic or neutrally charged. Soil samples shall be obtained in areas where the wattles will be placed and analyzed for the appropriate PAM flocculant to be utilized with each wattle.

Construction Methods

Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans. Install wattles to the top of the ditch according to the detail provided in the plans. Overlap adjoining sections of wattles a minimum of 6 in. Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with section 1631-3(B) of the Standard Specifications, or in accordance with specifications provided elsewhere in this contract. Apply PAM over the lower center portion of the wattle where the water is going to flow over at a rate of 3.5 ounces per wattle. PAM applications shall be done during construction activities after every rainfall event that is equal to or exceeds 0.25 in.

The Contractor shall maintain the wattles until the project is accepted or until the wattles are removed, and shall remove and dispose of silt accumulations at the wattles when so directed in accordance with the requirements of Section 1630 of the *Standard Specifications*.

Measurement and Payment

Wattles will be measured and paid for by the actual number of linear feet of wattles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the Wattles.

Matting will be measured and paid for in accordance with section 1631-4 of the *Standard Specifications*, or in accordance with specifications provided elsewhere in this contract.

Polyacrylamide(*PAM*) will be measured and paid for by the actual weight in pounds of PAM applied to the wattles. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to apply the *Polyacrylamide*(*PAM*).

Payment will be made under:

Pay ItemPay UnitPolyacrylamide(PAM)PoundWattleLinear Foot

EROSION & SEDIMENT CONTROL/STORMWATER CERTIFICATION

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein

regardless of whether or not a National Pollutant Discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the Erosion and Sediment Control/Stormwater Pollution Prevention Plan is implemented and maintained over the life of the contract.

- (A) Certified Supervisor –Provide a certified Erosion & Sediment Control Stormwater Supervisor to manage the Contractor and subcontractor(s) operations, insure compliance with Federal, State and Local ordinances and regulations, and to manage the Quality Control Program.
- (B) Certified Foreman Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) Certified Installer Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.
- (D) Certified Designer Provide a certified designer for the design of the erosion and sediment control stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control stormwater plan.

Roles and Responsibilities

- (A) Certified Erosion & Sediment Control Stormwater Supervisor The Certified Supervisor shall be responsible for ensuring erosion and sediment/stormwater control is adequately implemented and maintained on the project and conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours from initial exposure of an erodible surface to the project's final acceptance when questions or concerns arise with Erosion and Sedimentation Control/Stormwater issues. Perform the following duties:
- (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment/stormwater control measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment/stormwater control preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required weekly erosion control punchlist and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.

- (d) Implement the erosion and sediment/stormwater control site plans requested.
- (e) Provide for erosion and sediment/stormwater control methods for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
- (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
- (g) Conduct all erosion and sediment/stormwater control work in a timely and workmanlike manner.
- (h) Fully install erosion and sediment/stormwater control work prior to suspension of the work.
- (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment/stormwater control issues due to the Contractor's operations.
- (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces and/or any location where sediment leaves the Right-of-Way.
- (k) Have available a set of erosion control plans that has been properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
- (2) Requirements set forth under the NPDES Permit The Department's NPDES permit outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000*, *General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated E&SC Program. Some of the requirements are, but are not limited to:
 - (a) Control project site waste to prevent contamination of surface or ground waters of the state (i.e. construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste).
 - (b) Inspect E&SC/Stormwater devices at least once every 7 calendar days, twice weekly for 303(d) impaired streams, and within 24 hours after a significant rainfall event of 0.5 inches within 24 hours.
 - (c) Maintain an onsite rain gauge and a record of rainfall amounts and dates.
 - (d) Maintain E&SC/Stormwater inspection records for review by Department and Regulatory personnel upon request.
 - (e) Implement approved reclamation plans on all borrow pits and waste sites.
 - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
 - (g) Provide secondary containment for bulk storage of liquid materials.

- (h) Provide training for employees concerning general E&SC/Stormwater awareness, the NPDES Permit requirements, and the requirements of the *General Permit, NCG010000*.
- (i) Report violations of the NPDES permit to the Engineer who will notify the DWQ Regional Office within 24 hours.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions of permits. The quality control program shall:
- (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
- (b) Ensure that all operators and/or subcontractor(s) on site have the proper erosion and sediment/stormwater control certification.
- (c) Notify the Engineer when the required certified erosion and sediment/stormwater control personnel are not available on the job site when needed.
- (d) Conduct the inspections required by the NPDES permit.
- (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
- (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
- (g) Maintain temporary erosion and sediment control devices.
- (h) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
- (i) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) Certified Foreman At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
- (1) Foreman in charge of grading activities
- (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
- (3) Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) *Certified Installers* Provide at least one onsite, Level I Certified Installer for each of the following erosion or sediment/stormwater control crew:
- (1) Seeding and Mulching
- (2) Temporary Seeding
- (3) Temporary Mulching
- (4) Sodding
- (5) Silt fence or other perimeter erosion/sediment control device installations
- (6) Erosion control blanket installation
- (7) Hydraulic tackifier installation
- (8) Turbidity curtain installation
- (9) Rock ditch check/sediment dam installation
- (10) Ditch liner/matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
- (14) Pipe installations within jurisdictional areas

If a *Certified Installer* is not onsite, the Contractor may substitute a Level I Installer with a Level II Foreman, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

(D) Certified Designer – Include the certification number of the Level III-B Certified Designer on the erosion and sediment control stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control stormwater plan.

Preconstruction Meeting

Furnish the names of the Certified Erosion & Sediment Control Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer - Operations to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of a *Continuing Immediate Corrective Action (Continuing ICA)*, *Notice of Violation*, or *Cease and Desist Order* for erosion and sediment control/stormwater related issues.

Should any of the following circumstances occur, the Chief Engineer may suspend or permanently revoke such certification.

- (A) Failure to adequately perform the duties as defined within the certification program
- (B) Issuance of a continuing ICA, NOV, or Cease and Desist Order
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications
- (D) Demonstration of erroneous documentation or reporting techniques
- (E) Cheating or copying another candidate's work on an examination
- (F) Intentional falsification of records
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions
- (H) Dismissal from a company for any of the above reasons
- (I) Suspension or revocation of one's certification within another state

Suspension or revocation of a certification will be sent by certified mail to the registrant and the Corporate Head of the company that employs the registrant.

A registrant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer - Operations 1537 Mail Service Center Raleigh, NC 27699-1537

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The registrant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the registrant.

If a certification is temporarily suspended, the registrant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Erosion & Sediment Control Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer will be incidental to the project for which no direct compensation will be made.

EROSION, SILTATION, AND POLLUTION CONTROL

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with Section 107-13 of the *Standard Specifications*. Silt fence and erosion control measures shall be installed in accordance with the Section 1605 of the *Standard Specifications*, and in locations directed by the Engineer or his representative.

ENVIRONMENTAL STEWARDSHIP AND PERFORMANCE OF EROSION CONTROL

The Contractor shall perform all aspects of his / her work related to the project in a manner that is considerate of the environment and is representative of the Department's commitment to environmental stewardship. The Contractor shall take initiative to adhere to the erosion control plans and all provisions stated in the related permits. The Contractor shall provide additional measures above and beyond the plans and provisions when required to protect the environment. The Contractor shall also comply with all other general requirements of the regulatory agencies. These include but are not limited to the US Army Corps of Engineers, NC Wildlife Resources Commission (comments included in the Corps permit), NC Department of Environment and Natural Resources — Land Quality Section, NC Department of Environment and Natural Resources — Water Quality Section, etc. It is the responsibility of the Contractor to be familiar and to comply with the contract permit provisions, erosion control plan, general requirements of the agencies, and all laws pertaining to land disturbing activities.

Erosion Control Devices shall be installed and maintained in a timely manner throughout the life of the project. Such devices shall be constructed and maintained by the end of each workday. Modifications to the Erosion Control Plan shall be approved by the Engineer or his representative. Prior to grubbing and / or grade-work, erosion control devices shall be installed to prevent any loss of sedimentation into streams or outside the perimeter of the project. Inlet and outlet protection for pipes shall be constructed as part of the pipe installation in a continuous manner. Erosion control devices should not be placed in the stream itself.

In the event the Contractor does not comply with the erosion control plan and environmental conditions of the contract, a **monetary penalty of \$1,000.00 per day** shall be imposed until the corrective action is taken in order to meet the requirements. This penalty shall pertain to any permit condition and erosion control measure that is not installed and maintained in accordance with the erosion control plan, permit conditions, project special provisions, <u>Standard</u>

<u>Specifications</u>, and directions provided by the Engineer or his/her representative. Disregard for the environment by the Contractor shall also subject the Contractor to such penalties.

In the event that a Notice of Violation is issued for the project by NCDENR, the Contractor shall be assessed a single amount of \$5,000.00. If additional Violations are issued on the same project, a monetary penalty of \$10,000.00 per occurrence will be imposed on the Contractor. Subsequent to the issuance of a NOV, the Contractor shall work in a continuous manner to comply with the required corrective action by the deadline given by the issuing agency. If the corrective actions are not completed by the required date of compliance, the Department shall impose an additional monetary penalty of \$1,000.00 per day. All penalties stated above shall also apply to the issuance of an Immediate Corrective Action (ICA) by the Department.

All penalties described above shall be deducted from monies due to the Contractor. The Contractor shall also comply with Article 107-13 and Division 16 of the Standard Specifications.

ENVIRONMENTAL NOTES TO CONTRACTOR

- 1. Environmental stewardship and timely performance of erosion control shall be expected of the Contractor on this project.
- The Contractor may be subject to fines imposed by the Department for violations and / or non-compliance related to environmental permits and erosion control issues (see special provisions).
- 3. Pipe installation shall include immediate protection of the inlet and outlet with appropriate erosion control measures as part of the pipe installation process by the end of each day.
- 4. Installation of all pipe(s) shall be completed in a continuous manner.
- 5. Vegetation shall not be disturbed beyond the limits of construction without approval by the Engineer.
- 6. Any ground disturbance beyond areas protected by installed erosion control devices shall be protected immediately no exceptions. This may require hand seeding and mulching in some cases.
- 7. Temporary erosion control measures to protect areas of work shall be installed by end of each day, regardless the construction stage of a particular operation.
- 8. Erosion control measures installed after the fact is not acceptable practice.
- 9. Ditches that are not to final grade shall have the necessary temporary erosion control measures installed by the end of the day, including any basins and rock checks.
- 10. Filter stone and Class B Rip Rap for erosion control shall be installed at any location where runoff leaves the project. Class B Rip Rap only is not acceptable.
- 11. Blasting shall be controlled with appropriate measures to prevent fly rock and loss of material into rivers and streams and outside the limits of construction. Blasting mats will be required. Blasting shall not take place without the presence of an Inspector. The Contractor shall provide a 24-hour notice prior to blasting in a particular area. The Contractor shall be responsible for any and all damages that may occur from blasting, including any fines. The Contractor shall consider and implement when feasible alternative methods to blasting around environmentally sensitive areas.

- 12. No disturbed area shall be left unprotected from sediment runoff by the end of each day.
- 13. Grubbing shall not take place in an area until immediately before grading operations are to commence in that particular area.
- 14. The Contractor is responsible for being familiar with the conditions of the environmental permits.
- 15. The Contractor must comply with all provisions of the contract, standard specifications and drawings, and best management practices for bridge demolition and erosion control.
- 16. The presence of the Engineer or Inspector shall in no way lessen the Contractor's responsibility for compliance with the permits, conformity with erosion control, and protection of the environment. Should the Engineer or Inspector fail to point out work that is not in compliance for any reason, it shall in no way prevent later rejection or correction to the unsatisfactory materials or work when discovered.

RESPONSE FOR EROSION CONTROL

The Contractor shall respond in a timely manner for the installation and maintenance of Erosion Control Devices.

Erosion Control Measures shall be installed prior to ground disturbing activities in such a manner to prevent runoff and offsite sedimentation. Failure to install measures according to the erosion control plan and failure to install additional measures when grading operations deems necessary shall be considered a violation of the Environmental Stewardship and Performance of Erosion Control Special Provision. All disturbed areas shall be protected with adequate erosion control measures by the end of each workday. Such violations shall result in the associated monetary penalty of \$1,000 per day until the corrective action(s) has been completed.

Erosion Control Devices shall be maintained in a continual manner until they are no longer needed as determined by the Engineer. After any rain event, the Contractor shall begin maintenance of the devices within 24 hours or as soon as practical when wet conditions do not allow for operation of heavy equipment. This is considered not practical when in the opinion of the Engineer or his representative, heavy equipment on extremely wet embankments will cause more damage than if some time is allowed for drying. When the Contractor is working on the project and urgent attention is required, the Contractor shall respond immediately when directed by the Engineer or Inspector to address installation and / or maintenance of erosion control devices or any other work to address sedimentation loss.

If the Contractor is not currently working on the project, he / she shall respond within 24 hours with adequate equipment and personnel to address any erosion and loss of sedimentation.

Failure to comply with any part of this special provision shall be considered a violation of the Environmental Stewardship and Performance of Erosion Control Special Provision. Such violations shall result in the associated monetary penalty of \$1,000 per day until the corrective action(s) has been completed.

If required, the Engineer may exercise the provisions of Article 105-16, "Failure to Maintain the Project or Perform Erosion Control Work", in addition to any associated penalties.

No direct payment will be made under Response for Erosion Control. This work will be considered incidental to the various other bid items in the Contract.

SEEDING AND MULCHING

SPECIAL NOTICE: Be advised that the Prime Contractor must contact the Engineer prior to beginning any actual seeding and mulching operations. It is requested that a minimum forty-eight (48) hour notice be given so that the Project Inspector may be onsite for verification of landscape materials (seed mixture, limestone and fertilizer) and sufficient quantities for area of intended coverage, per *Standard Specifications*. Be reminded that this advanced notification requirement is mandatory. Failure to comply with this provision may result in the Contractor not being fully compensated for this work, given our inability to verify the quantities following placement on the project.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

Shoulder and Median Areas

August 1 - June 1		May 1 - September 1		
20#	Kentucky Bluegrass	20#	Kentucky Bluegrass	
75#	Hard Fescue	75#	Hard Fescue	
25#	Rye Grain	10#	German or Browntop Millet	
500#	Fertilizer	500#	Fertilizer	
4000#	Limestone	4000#	Limestone	

Areas Beyond the Mowing Pattern, Waste and Borrow Areas

August 1 - June 1		May 1 - September 1		
100#	Tall Fescue	100#	Tall Fescue	
15#	Kentucky Bluegrass	15#	Kentucky Bluegrass	
30#	Hard Fescue	30#	Hard Fescue	
25#	Rye Grain	10#	German or Browntop Millet	
500#	Fertilizer	500#	Fertilizer	
4000#	Limestone	4000#	Limestone	

Approved Tall Fescue Cultivars

Adventure	Bonanza	Guardian	Rebel Jr
Adventure II	Bonanza II	Houndog	Rebel II
Airlie	Bulldog 51	Inferno	Red Coat
Amigo	Chapel Hill	Jaguar	Rendition
Anthem	Chesapeake	Jaguar III	Renegade
Anthem II	Chieftain	Kentucky 31	Safari

Apache	Coronado	Kitty Hawk	Shelby
Apache II	Covenant	Kitty Hawk 2000	Shenandoah
Arid	Crossfire II	Monarch	Southern Choice II
Arid II	Debutante	Montauk	South Paw
Arid III	Duster	Mustang	Tempo
Aztec II	Escalade	Mustang III	Titan
Barlexas	Falcon	Olympic	Titan Ltd.
Barlexas II	Falcon III	Pacer	Tomahawk
Barrera	Finelawn	Paraiso	Tacer
Barrington	Finelawn I	Pixie	Trailblazer
Bingo	Finelawn Petite	Pyramid	Tribute
Bravo	Genesis	Quest	Trooper
Brookstone	Grande	Rebel	Wolfpack
			Wrangler

Approved Kentucky Bluegrass Cultivars

Adelphi	Brilliant	Kenblue	Princeton
Apollo	Bristol	Liberator	Ram I
Bariris	Challenger	Merit	Rugby
Baron	Columbia	Nuglade	Sydsport
Baronie	Fylking	Odyssey	Touchdown
Bartitia	Glade	Plush	Vantage

Approved Hard Fescue Cultivars

Aurora	Minotaur	Scaldis	Waldina
Bardur	Nordic	Spartan	Warwick
Crystal	Reliant	Valda	

On cut and fill slopes 2:1 or steeper add 25# (28kg) Rye Grain November 1 - March 1.

On cut and fill slopes 2:1 or steeper add 20# Sericea Lespedeza January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. Upon written approval of the Engineer, a different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis.

Fertilizer Topdressing

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre (560 kg per hectare). Upon written approval of the Engineer, a different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis.

Mulching

(A) General

All seeded areas shall be mulched unless otherwise directed by the Engineer.

Grain straw may be used as mulch at any time of the year. If permission to use material other than grain straw is requested by the Contractor and the use of such material is approved by the Engineer, the seasonal limitations, the methods and rates of application, the type of binding material, or other conditions governing the use of such material will be established by the Engineer at the time of approval.

(B) Applying Mulch

Mulch shall be applied within 24 hours after the completion of seeding unless otherwise permitted by the Engineer. Care shall be exercised to prevent displacement of soil or seed or other damage to the seeded area during the mulching operations.

Mulch shall be uniformly spread by hand or by approved mechanical spreaders or blowers, which will provide an acceptable application. An acceptable application will be that which will allow some sunlight to penetrate and air to circulate but also partially shade the ground, reduce erosion, and conserve soil moisture.

(C) Holding Mulch

Mulch shall be held in place by applying a sufficient amount of asphalt or other approved binding material to assure that the mulch is properly held in place. The rate and method of application of binding material shall meet the approval of the Engineer. Where the binding material is not applied directly with the mulch it shall be applied immediately following the mulch application.

During the application of asphalt binding material, or other approved binding materials, which may cause damage, adequate precautions shall be taken to prevent damage to traffic, structures, guardrails, traffic control, devices, or any other appurtenances. The Contractor shall either provide adequate covering or change methods of application as required to avoid such damage. When such damage occurs the Contractor shall repair it, including any cleaning that may be necessary.

The Contractor shall take sufficient precautions to prevent mulch from entering drainage structures through displacement by wind, water, or other causes and shall promptly remove any blockage to drainage facilities, which may occur.

Method of Measurement

The quantity of seeding and mulching to be paid for will be the actual number of acres of seeding and mulching, measured along the surface of the ground, which has been completed and accepted.

Basis of Payment

The quantity of seeding and mulching, measured as provided in the *Standard Specifications* will be paid for at the contract unit price per acre for "Seeding and Mulching." No direct payment will be made for furnishing and applying limestone and fertilizer as such work and materials will be considered incidental to the work covered by "Seeding and Mulching."

Compensation

Payments will be full compensation for all work including but not limited to furnishing all limestone, fertilizer, seed, mulch, asphalt, and other materials; cleanup of vegetation, stone, and other debris prior to seedbed preparation and mulching; seedbed preparation; applying and covering limestone, fertilizer, and seed; applying mulch, and holding mulch.

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

Within quarantined area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a quarantined county

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or *http://www.ncagr.com/plantind/* to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.

- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious Weed	Limitations per Lb. Of Seed	Restricted Noxious Weed	Limitations per Lb. of Seed
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds

Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)

Kobe Lespedeza

Korean Lespedeza

Browntop Millet

German Millet - Strain R

Weeping Lovegrass

Clover - Red/White/Crimson

Carpetgrass

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)

Kentucky Bluegrass (all approved varieties)

Hard Fescue (all approved varieties)

Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Japanese Millet Crownvetch Reed Canary Grass

Pensacola Bahiagrass Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass Bristly Locust Birdsfoot Trefoil
Big Bluestem Indiangrass Orchardgrass

Little Bluestem Switchgrass Yellow Blossom Sweet Clover

ERRATA

Revise the Standard Specifications for Roads and Structures July 2006 on all projects as follows:

Division 1

Page 1-1, replace AREA - American Railway Engineering Association with American Railway Engineering and Maintenance of Way Association.

Page 1-7, remove **L**- in middle of page after INVITATION TO BID and before LABORATORY.

Page 1-25, 102-16(R), move 2nd paragraph to left margin. It is not a part of this subarticle, but part of the entire article.

Division 2

Page 2-9, Subarticle 225-1(C), 1st paragraph, 2nd line, last word, add a "d" to make the word grade become *graded*.

Page 2-15, Subarticle 226-3, 5th paragraph, first line, replace the word in with the word is.

Page 2-23, Subarticle 235-4(B)(9), at the end of the sentence, replace finished greater with finished *grade*.

Page 2-28, Article 260-3, First paragraph, second line, remove the word *foot*.

Division 3

Page 3-13, Article 340-4, Second paragraph, change Flowable Backfill to Flowable Fill

Division 4

- Page 4-29, Article 420-13(A) Description, change reference from Section 1082 to Article 1081-6.
- Page 4-40 Subarticle 420-17(F) first line, change Subarticle 420-17(B) to (B) herein.
- Page 4-70, Article 442-13(B) Second sentence, change SSPC Guide 6I to SSPC Guide 6.
- Pages 4-72, 4-74, 4-76, at the top of the page, substitute the heading Section 452 with Section 450.
- Page 4-79, at the top of the page, substitute the heading Section 450 with Section 452
- Page 4-80, change 452-7 to 452-6 at the top of the page.
- Page 4-80, change Pay Item ____Steel Pile Retaining Walls, to *Sheet* Pile Retaining Walls.
- Page 4-88, 462-4, Title, Replace last word Measurement with the word *PAYMENT*

Division 5

- Page 5-8, Article 501-15 Measurement and Payment, delete the 4th paragraph that begins The quantity of lime, measured as provided ...
- Page 5-14, Article 520-11 Measurement and Payment, first paragraph, second line, delete will be.

Division 6

- Page 6-3, Article 600-9, 2nd Paragraph on this page, replace 818-5 with 818-4.
- Pages 6-30 and 31, Subarticle 610-3(A)(13) Move 2 paragraphs from the margin to the right under the number (13).
- Page 6-43, Article 610-8, 4th paragraph, remove the first the
- Page 6-44, 2nd full paragraph, 1st sentence, delete the first *and* and add *transverse* just before cross-slope control.
- Page 6-51, at the top of the page, add *610-14* on the same line, and just before the heading MAINTENANCE.
- Page 6-53, Article 620-4 sixth paragraph, second line; the word that should be *which*.
- Page 6-66, title, Replace EXISTNG with **EXISTING**
- Page 6-66, Article 657-1, Description, first sentence, replace PS/AR (hot-poured rubber asphalt with *hot applied joint sealer*.
- Page 6-66, Article 657-2, replace PS/AR (Hot-Poured Rubber Asphalt with the following:

ItemSectionHot Applied Joint Sealer1028-2

Page 6-67, at the top of the page, substitute the heading Section 654 with Section 657.

Page 6-67, Article 657-3 Construction Methods, 2nd paragraph, replace PS/AR sealant with *hot* applied joint sealer.

Page 6-71, 660-9(B)(1), Replace the first sentence of the first paragraph with the following:

Using the quantities shown in *Table 660-1*, apply asphalt material to the existing surface followed by an application of No. 78 M or lightweight aggregate.

Page 6-89; Add a period at the end of the last sentence at the bottom of the page.

Page 6-90, Article 663-5, first paragraph, first sentence, change 50oF to $50^{\circ}F$; third paragraph, fourth sentence change 325oF to $325^{\circ}F$.

Division 7

Page 7-12, at the top of the page, substitute the heading Section 710 with Section 700.

Page 7-15, Article 710-9, 4th paragraph, last line, change 710-11(B) to 710-10(B).

Division 8

Page 8-13, Article 808-3, 4th Paragraph, third line, replace Eexcavation with *Excavation*

Page 8-35, Article 848-2, Item: Replace Concrete with *Concrete*

Division 9

Page 9-2, add 901-3 just before CONSTRUCTION METHODS

Division 10

Page 10-12, near bottom of page add (*C*) before Proportioning and Mixing of Modified Compositions, which should be bold type.

Page 10-28, at the top of the page, substitute Section 1006 for 1005.

Page 10-54, Subarticle 1018-2A), First line, substitute (\mathbf{B}) for II, third line, substitute (\mathbf{B})(2) for II-b.

Pages 10-56, 10-58, 10-60 at the top of the page, substitute Section 1018 with Section 1020.

Page 10-84, Table 1042-1, Class 2, Maximum, change from 23r to 23.

Page 10-84, Article 1042-2 Testing, last sentence, replace the word alterations with the word *cycles*.

Page 10-100, Table 1056-1, replace on the line for Trapezoidal Tear Strength:

Type 1	Type 2	Type 3		Type 4
		Class A	Class B	Soil Stabilization
45 lb	<i>75</i> lb			<i>75</i> lb

Page 10-116, Subarticle 1070-10, first paragraph, second sentence, add *or* just before cold-forged sleeve.

Pages 10-136 through 10-147, at the top of the page, substitute Section 1074 with Section 1072.

Page 10-157, Article 1077-11, first paragraph, change the reference from Subarticle 420-18(B) to Subarticle 420-17(B).

Page 10-200, Subarticle 1080-14(B), change reference to ASTM D3359

Page 10-211, at the top of the page, substitute Section 1081 with Section 1082.

Page 10-229, add 1088-6 BLANK on the line above 1088-7 TUBULAR MARKERS.

Page 10-244, add **1089-10** *BLANK* and **1089-11** *BLANK* on the lines just above 1089-12 FLAGGER.

Page 10-272, delete Article 1098-6 in its entirety. Renumber Articles 1098-7 through 1098-17 as Articles 1098-6 through 1098-16 consecutively.

Division 12

Page 12-21 Add 1266-2 just before the heading MATERIALS.

Division 14

Page 14-33, Article 1413-6, first paragraph, first sentence, first line, replace made with paid for.

Division 15

- □ Page 15-2 add 1500-4 just before the heading WEEKEND, NIGHT AND HOLIDAY WORK.
- □ Page 15-4, Subarticle 1505-3(A)(2), replace the 2nd line with the following: *Provide* shielding or shoring as required under Section 150 or as required elsewhere in the contract.
- □ Page 15-5, add *1505-6* on the same line and just before the heading MEASUREMENT AND PAYMENT. (Remove the period after PAYMENT.)
- □ Page 15-6, Article 1505-6(3), delete in Section 1175 and replace it with elsewhere in the contract.
- □ Page 15-8, add **1510-4** on the same line and just before the heading MEASUREMENT AND PAYMENT.
- □ Page 15-10, substitute **BLANK** for CONSTRUCTION REQUIREMENTS on the same line and just before 1515-4.
- □ Page 15-10, substitute **CONSTRUCTION REQUIREMENTS** for General Requirements
- □ Page 15-10, Article 1515-4, add (*D*) just before the bolded Fire Hydrants.
- □ Page 15-13, Article 1520-3, 8th paragraph, add *pipe* after diameter.

- □ Page 15-22, add *1540-3* on the same line and just before the heading CONSTRUCTION REQUIREMENTS.
- □ Page 15-28, Replace 1550-6 METHOD OF MEASUREMENT with *MEASUREMENT AND PAYMENT*.

Division 16

□ Page 16-12, Subarticle 1632-1(C) ¼ Inch hardware cloth, change the minimum width from 24 inches to 48 inches.

Division 17

- □ Page 17-19, Subarticle 1725-2 Material, Second paragraph, change Article 1098-7 to 1098-8
- □ Page 17-20, Subarticle 1726-2 Material, Second paragraph, change Article 1098-8 to 1098-9

END

MINIMUM WAGES

FEDERAL The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY-FIVE CENTS (\$7.25) per hour.

STATE The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees' wages at a rate of not less than SEVEN DOLLARS AND TWENTY-FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY-FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY-FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY-FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, State or Federal. It is the responsibility of the Contractor to keep himself fully informed of all Federal and State Laws affecting his contract.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BID FORM

WBS Element: 11C.086120 Contract Number: 11-01-708
DESCRIPTION: Grading, Widening, Drainage, Base and Pave on 0.96 Miles of SR 1345 (Beulah Church

Road) in Surry County, North Carolina

PAGE 1 OF 2

ITEM	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
1	800	Mobilization	1	LS		
2	SP	Comprehensive Grading	1	LS		
3	SP	15" Side Drain Pipe	60	LFT		
4	SP	18" Drainage Pipe	300	LFT		
5	SP	24" Drainage Pipe	100	LFT		
6	520	Aggregate Base Course	5,200	TON		
7	545	Incidental Stone Base	400	TON		
8	660	Asphalt Surface Treatment, Mat & Split Seal	11,800	SYD		
9	867	Fence Reset	3,000	LFT		
10	876	Rip Rap, Class B	400	TON		
11	1605	Temporary Silt Fence	300	LFT		
12	1610	Sediment Control Stone	300	TON		
13	1610	Stone for Erosion Control, Class B	300	TON		
14	SP	Permanent Soil Reinforcement Mat	1,000	SYD		
15	SP	Coir Fiber Baffle	200	LFT		
16	SP	Wattles	2,000	LFT		
17	SP	Polyacrylamide (PAM)	50	LBS		
18	1630	Silt Excavation	500	CYD		
19	1631	Matting for Erosion Control	3,000	SYD		
20	1660	Seeding & Mulching	4.5	ACR		

Transfer Total to Page 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BID FORM

WBS Element: 11C.086120 DESCRIPTION: Grading, Widening, Drain: Road) in Surry County, No	Contract Number: 11-01-708 age, Base and Pave on 0.96 Miles of SR 1345 (Beulah Church rth Carolina
	PAGE 2 OF 2
TOTAL BID FOR PROJECT:	
CONTRACTOR	
ADDRESS	
Federal Identification Number	Contractors License Number
Authorized Agent	Title
Signature	Date
Witness	Title
Signature	Date
	AFFIX CORPORATE SEAL HERE
	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION with Article 103-1 of the Standard Specifications for Roads
Reviewed by	(date)
Accepted by NCDOT	Division Engineer(date)

NON COLLUSION AFFIDAVIT

(To Be Executed and Returned with Quotation)

The person executing this bid solemnly swears (or affirms) that neither he, no any official agent, or employee of the bidder has entered into any agreement, restraint of free competitive bidding in connection with this bid.

NAME OF CONTRACTOR:	
SIGNATURE OF CONTRACTOR:	
NOTE: AFFIDAVIT MUST BE NOTARIZE	D
Subscribed and sworn to me this the day of 2011.	NOTARY SEAL
(SIGNATURE OF NOTARY PUBLIC)	
OfCounty	
State of	
My Commission Expires	

DEBARMENT CERTIFICATION OF BIDDERS

Instructions & conditions for certification

- 1, By signing and submitting this proposal, the bidder is providing the certification set out below.
- 2. The inability of a bidder to provide the certification required below will not necessarily result in denial of participation in this contract. If the certification is not provided, the bidder must submit an explanation (exception) of why it cannot provide the certification set out below. The certification or explanation (exception) will be considered in connection with the Department's determination whether to award the contract. However, failure of the prospective bidder to furnish a certification or an explanation (exception) may be grounds for rejection of the bid.
- 3. The certification in this provision is a material representation of fact upon which reliance is placed when the Department determines whether or not to award the contract. If it is later determined that the bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department may terminate this contract for cause of default.
- 4. The prospective bidder shall provide immediate written notice to the Department if at any Time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transactions", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12540. A copy of the Federal Rules requiring this certification and detailing the definitions and coverage's may be obtained from the Contract Officer of the Department.
- 6. The bidder agrees by submitting this bid that, should the contract be awarded, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract, unless authorized by the Department.
- 7. The prospective bidder further agrees by submitting this proposal that it will include the Federal-Aid Provision titled "Required Contract Provisions Federal-Aid Construction Contract") Form FHWA PR 1273) provided by the Department, without subsequent modification, in all lower tier covered truncations.

- 8. The prospective bidder may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not disbarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principles.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this Provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by prudent person in the ordinary course of business dealings.

Except for transactions authorized under paragraph 6 of these instructions, if the successful bidder knowingly enters into a lower tier covered transaction whit a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition together remedies available t the Federal Government, the Department may terminate this transaction for cause of default.

	LISTIN	G OF M	LISTING OF MB & WB SUBCONTRACTORS	Sheet	Jo
FIRM NAME AND ADDRESS	MB OR WB	ITEM NO.	ITEM DESCRIPTION	* AGREED UPON UNIT PRICE	DOLLAR VOL. OF SUBLET ITEM
			*THE DOLLAR VOLUME SHOWN IN THIS	LUME SHOWN IN	THIS
COLUMN DOI 1 AR VOLLIME OF WB SLIBCONTRACTOR	TRACTOR		SHALL BE THE ACTITAL PRICE AGREED UPON BY	AI PRICE AGREE	D I IPON RY
WB PERCENTAGE OF TOTAL CONTRACT BID		PRICE	THE PRIME CONTRACTOR AND THE MB/WB SUB-	CTOR AND THE	/IB/WB SUB-
DOLLAR VOLUME OF MB SUBCONTRACTOR MB PERCENTAGE OF TOTAL CONTRACT RID PRICE	TRACTOR_	PRICE	CONTRACTOR. THESE PRICES WILL BE USED TO DETERMINE THE PERCENTAGES OF MRAWR	SE PRICES WILL E	SE USED TO
			PARTICIPATION	PARTICIPATION IN THE CONTRACT	CT.